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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,920	06/26/2001	Richard Charles Gaus JR.	RD-25376	8295

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EXAMINER	
NGUYEN, PHUNG	
ART UNIT	**PAPER NUMBER**
2632	

DATE MAILED: 02/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/681,920	GAUS ET AL.	
	Examiner	Art Unit	
	Phung T Nguyen	2632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 June 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2, 7-11, 14, 15, 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Puckette et al. [U.S. Pat. 6,346,875] in view of Hershey et al. [U.S. Pat. 5,519,692]

Regarding claim 1: Puckette et al. disclose a GHM aggregator comprising a master controller 51 (figure 1, col. 3, lines 2-5) connected to the power line for transmitting GHM signals; a boundary component in the form of meter 17 (col. 2, lines 42-58) connected to the power line; Puckette et al. do not directly show a GHM addressable device connected to the power line, the GHM addressable device defining a boundary of a network region based on the GHM signals transmitted over the power line. However, Puckette et al. disclose the transceiver 16 (figure 1, col. 2, lines 61-67) for transmitting power consumption data in the form of GHM signals over power line 18. It is seen that the transceiver 16 of Puckette et al. is a GHM addressable device because the transceiver 16 transmits data that is formatted into packets includes a source field (identifying the originator of transmitted data). Furthermore, using an address to identify the recipient or originator of transmitted data is well known in the art as taught by Hershey et al. (col. 5, lines 26-46). Therefore, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to employ the teaching of Hershey et al. in the system of Puckette et al. in order to identify a device on a Local Area Network.

Regarding claim 2: Puckette et al. disclose the master controller 51 comprising a GHM transmitter for transmitting the GHM signals on the power line (col. 3, lines 2-8).

Regarding claim 7: Puckette et al. disclose a local controller in the form of aggregator 24 (col. 3, lines 9-17) connected to the power line, the local controller comprises a GHM receiver 29 and a GHM transmitter 39 for receiving and transmitting GHM signals over the power line.

Regarding claim 8: Puckette et al. disclose the local controller comprises a first modem and the master controller comprises a second modem (col. 3, lines 1-8).

Regarding claim 9: Puckette et al. disclose the local controller comprises a first RF link and the master controller comprises a second RF link (col. 4, lines 8-21).

Regarding claim 10: Puckette et al. disclose a plurality of meters 17 (figure 1, col. 2, lines 42-55) coupled to the power line.

Regarding claim 11: Puckette et al. disclose the steps of transmitting a GHM signal, receiving the GHM signal, interpreting the GHM signal (col. 2, lines 56-64); and establishing a network region in the reconfigurable network based on the step of interpreting the GHM signal (col. 2, lines 64-67, and col. 3, lines 1-8), plus the consideration of claim 1 above.

Regarding claim 14: All the claimed subject matter is already discussed in respect to claims 1 and 7 above, Puckette et al. also disclose interpreting the GHM signals and defining a boundary of a second region based on the GHM signals transmitted over the power line (col. 2, lines 64-67, and col. 3, lines 1-8).

Regarding claim 15: Puckette et al. disclose the master controller in the form of station 51 (col. 3, lines 2-8) for collecting data for meter 17. It is inherently seen that the master controller including the GHM transmitter and the GHM receiver.

Regarding claim 20: Refer to claim 10 above.

Regarding claim 21: Puckette et al. disclose all the claimed subject matter as claimed (col. 2, lines 61-67, and col. 3, lines 1-8) except for determining if a dotting portion is present in the signal. Hershey et al. teach the dot product unit 79 (figure 2, col. 7, lines 35-38) for making a data bit decisions. Since Puckette et al. teach the known concept of transmitting commands and data on the power line, it would have been obvious to the skilled artisan to combine the teachings of Hershey et al. and Puckette et al. so that there is less possibility of loss of communications due to interference.

Regarding claim 22: Refer to claim 1 above.

Regarding claim 23: Puckette et al. disclose a local controller 24 (col. 3, lines 9-17).

Regarding claim 24: Puckette et al. disclose a network region in the reconfigurable network based on the step of executing the command portion (col. 1, lines 58-67, and col. 3, lines 1-2).

Regarding claim 25: Puckette et al. disclose the signal comprising a GHM signal (col. 4, lines 46-49).

3. Claims 3, 4, 12, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Puckette et al. in view of Hershey et al. and further in view of Payne [U.S. Pat. 6,040,769]

Regarding claims 3 and 4: Puckette et al. disclose the capacitor bank 50 as seen in figure 1, col.2, lines 35-38; a microprocessor connected to the GHM receiver (col. 2, lines 50-61) for receiving and interpreting the GHM signals. The combination does not show an impedance connected in series with the capacitor bank as claimed. However, using the impedance as a switching device is old and well known in the art as taught by Payne col. 4, lines 54-56, and col. 5, lines 1-9). Therefore, it would have been obvious to the skilled artisan to use the technique of Payne into the system of Puckette et al. and Hershey et al. in order to selectively switch in and out of the reconfigurable network if desired.

Regarding claim 12: Refer to claims 3 and 4 above.

Regarding claims 16 and 17: Refer to claims 3 and 4 above.

4. Claims 5, 6, 13, and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Puckette et al. in view of Hershey et al. and Payne and further in view of Rickard et al. [U.S. Pat. 5,977,650]

Regarding claims 5 and 6: All the claimed subject matter is already discussed in respect to claims 3 and 4 above except the boundary component comprising an underground cable. However, Rickard et al. disclose a transmitting communication signals over a power line network comprising the network which can comprise underground or overhead lines or a combination of these (col. 3, lines 59-60). Therefore, it would have been obvious to the skilled artisan to use the teaching of Rickard et al. into the system of the combination because extending the use of the device would be an advantage.

Regarding claim 13: Refer to claims 5 and 6 above.

Regarding claims 18 and 19: Refer to claims 5 and 6 above.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Shimada et al. [U.S. Pat. 5,821,637] disclose a communication apparatus for converting an unbalanced signal into a balanced signal.

b. Hershey et al. [U.S. Pat. 5,568,522] discloses a correction of multipath distorsion in wideband carrier signals.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung T Nguyen whose telephone number is 703-308-6252. The examiner can normally be reached on 8:00am-5:30pm Mon thru. Friday, with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 703-308-6730. The fax numbers for the organization where this application or proceeding is assigned are 703-305-3988 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Examiner: Phung Nguyen

DANIEL J. WU
PRIMARY EXAMINER
2/22/03

Date: February 18, 2003